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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,624	04/13/2006	Eiko Kato	Q78079	4641
23373 7590 11/30/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER SULLIVAN, DANIELLE D				
ART UNIT		PAPER NUMBER		
1616				
NOTIFICATION DATE		DELIVERY MODE		
11/30/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/575,624

Applicant(s)

KATO ET AL.

Examiner

DANIELLE SULLIVAN

Art Unit

1616

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,10,13,14 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,10,13,14 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1, 3-7, 10, 13, 14 and 17 are pending examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the dihydric alcohol" in reference to 1,2-pentanediol or 1,2-hexanediol. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 10, 13, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (EP 1077066) in view of Murata (US 6,306,915).

Applicant's Invention

Applicant claims an agent comprising a) a salt of higher fatty acid ester of ascorbic acid-2-phosphoric acid ester and b) a 1,2-pentanediol or 1,2-hexanediol, wherein R is an aliphatic carboxylic acid having 10 to 20 carbon atoms. Claim 3 specifies R is selected from a residual group of lauric acid, myristic acid, palmitic acid, stearic acid, 2-hexyldecanoic acid or isostearic acid. Claim 4 specifies R is a residual group of palmitic acid. Claim 5 specifies the residual group is 2-hexyldecanoic acid. Claim 6 specifies the salt of the ester is a Na salt, a K salt, a Mg salt or a Zn salt. Claim 7 specifies the ester is 0.01-20% of the formulation. Claim 10 further limits the alcohol to 0.05% to 12. Claim 13 specifies the composition further comprises water. Claim 14 is directed towards cosmetic comprising the agent.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Ito et al. discloses an agent for preventing and treating skin diseases comprising an ascorbic acid derivative of formula (I) with a moisturizer selected from polyhydric alcohols such as propylene glycol and dipropylene glycol [0028], [0075] and [0078]. The salts of the ascorbic acid derivatives include sodium, potassium, magnesium and zinc [0056]. Example 8 discloses a cream comprising propylene glycol (6%), sodium 6-palmitoyloxy-L-ascorbic acid-2-phosphate (7%) and water.

Ito et al. teach the fatty acid residual group is preferably an alkyl group of 4 to 21 carbons atoms and that they are preferably long-chain fatty acids, including a carboxylic residue with an alkyl group comprising 4 to 21 atoms [0047]-[0054]. Examples 1-4

disclose dipropylene glycol with sodium L-ascorbic acid-2-phosphate or potassium L-ascorbic acid-2-phosphate.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Ito et al. do not disclose an example wherein Formula (I) and the polyhydric alcohol is 1,2-pentanediol or 1,2-hexanediol are in combination. However, Ito et al. teach fatty acid residual groups including a carboxylic residues with an alkyl group comprising 4 to 21 atoms. This encompasses a 2-hexyldecanoic acid which has 16 carbon atoms. Therefore, although not explicitly taught, the residual group is encompassed by the teachings of Ito et al. Furthermore, an example wherein Formula (I) and the polyhydric alcohol is 1,2-pentanediol or 1,2-hexanediol are in combination is not disclosed or taught. It is for this reason that Murata is joined.

Murata teaches moisturizing cosmetic composition comprising a polyhydric alcohol (column 7, lines 1-11). The polyhydric alcohol is selected from diethylene glycol, propylene glycol and 1,2-pentanediol (column 8, lines 59-65). In view of In re Susi, 169 USPQ 423 (C.C.P.A. 1971), the combination, for the same purpose, of one polyhydric alcohol with another explicitly disclosed in Murata is at least prima facie obvious. Hence, simple substitution of 1,2-pentanediol is at obvious.

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ito et al. and Murata to combine formula (I) with 1,2-pentanediol. One would have been motivated to combine 1,2-pentanediol because Murata teach it may be substituted in place of propylene glycol.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Sullivan whose telephone number is (571) 270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan
Patent Examiner
Art Unit 1616

/Mina Haghighatian/
Primary Examiner, Art Unit 1616